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# On Some Psyllids from the Hidaka Mountain Range, Hokkaido (Homoptera, Psyllidae)\*

By

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宮武頼夫\*\*：北海道日高山脈のキジラミ数種について

Comparing with the Daisetsu Mountains, the Hidaka Mountain Range is an entirely unexplored area so far as the psyllid fauna is concerned. In the present paper, two genera and six species of psyllids are recorded from Mt. Poroshiri, N. Hidaka Mountain Range. All materials were obtained by Dr. Jun-ichi AOKI who was a member of the research party to the area in 1971 organized by the Natural History Research Project of the National Science Museum, Tokyo, and to whom I wish to express my thanks for careful collecting.

All the species are newly recorded from the area, and one species is new to science and described in the present paper. Five species of *Psylla*, one of which is left undetermined, are also rather common in the Daisetsu Mountains and all seem to be Palearctic in their distribution. The new species belonging to *Rhinopsylla* which is recorded for the first time from Japan seems to be the Sino-Japanese element.

## ***Psylla alni* (LINNAEUS, 1758)**

*Specimens examined.* 1 ♀, North Cirque, Mt. Poroshiri, alt. 1,700 m, 25. vii. 1971, J. AOKI leg. 1 ♂, Umano-sé, Mt. Poroshiri, alt. 1,700 m, 25. vii. 1971, J. AOKI leg. 7 ♂ 7 ♀, Poroshiri-sansô, at the foot of Mt. Poroshiri, alt. 1,000 m, 28. vii. 1971, at light, J. AOKI leg.

## ***Psylla* sp.**

*Specimens examined.* 1 ♂, North Cirque, 25. vii. 1971, J. AOKI leg. 3 ♂ 1 ♀, Poroshiri-sansô, 28. vii. 1971, at light, J. AOKI leg.

This species, which has been treated as *Psylla mali* (SCHMIDBERGER) in my previous works, seems to be new to science, but seems better to be left undescribed until the material of the related species is available. It seems to be a member of a difficult species-complex.

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***Psylla abieti* KUWAYAMA, 1908**

*Specimens examined.* 2♂ 1♀ (*fl.*), 2♀ (*mg.*), Poroshiri-sansô, 28. vii. 1971, at light, J. AOKI leg.

The present collection also includes two forms of forewing coloration. One is uniformly flavous and semitransparent, and lacking in a marginal band (shown with *fl.* in the above collecting data). The other is almost transparent and has a brown band along the posterior margin from base to apex (shown with *mg.* in the above collecting record). The latter is slightly bigger and their marginal cells are longer.

***Psylla jezoensis* Y. MIYATAKE, 1963**

*Specimens examined.* 1♂ 1♀, Poroshiri-sansô, 28. vii. 1971, at light, J. AOKI leg.  
This is the first record of the psyllid attracted to light.

***Psylla haimatsucola* Y. MIYATAKE, 1964**

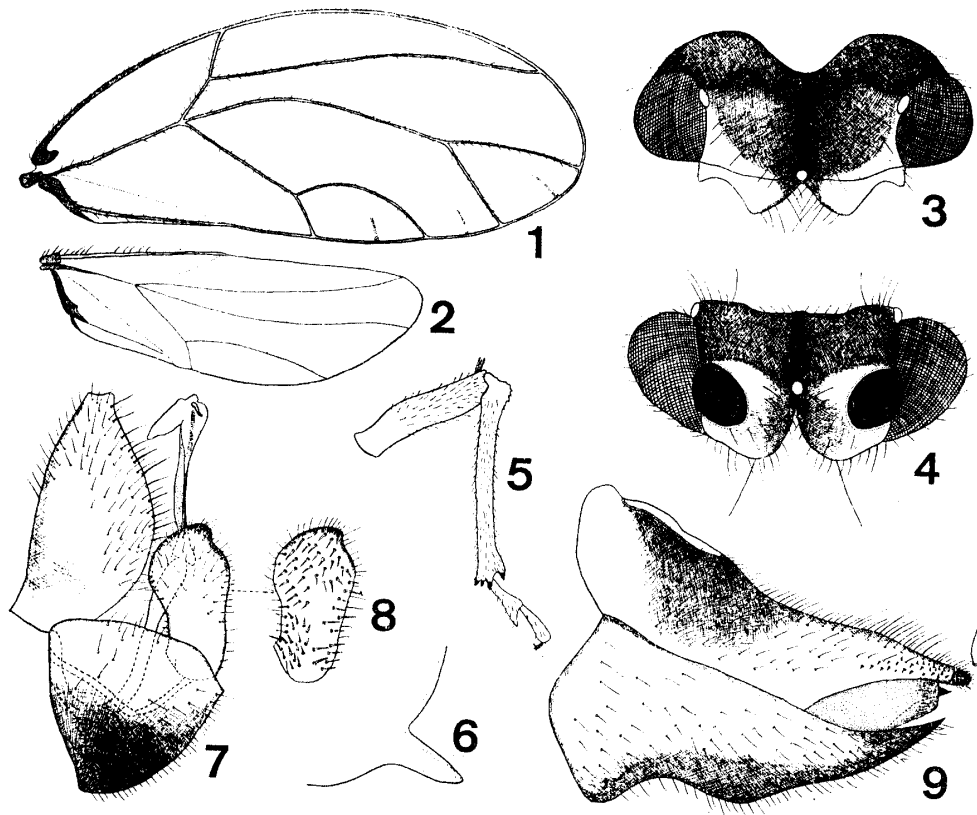
*Specimens examined.* 2♂ 1♀, Umano-sé, 25. vii. 1971, J. AOKI leg. 10♂ 17♀, Poroshiri-sansô, 28. vii. 1971, at light, J. AOKI leg.

***Rhinopsylla hidakensis* sp. nov.**

*Color.* General color brown to dark brown or black in mature individuals; uniformly light brown to greenish brown or with darker portion in immature individuals. Antenna dark brown to black, with two basal segments more or less lighter. Vertex dark brown to black, yellowish anteriorly. Pronotum yellowish brown to orange, with a small brownish macula on each side laterally; praescutum and mesoscutum shiny black, yellowish centrally from posterior margin of praescutum to anterior margin of mesoscutum; mesoscutellum and metathorax yellow to yellowish brown. Legs yellowish brown to brown, usually with darker streaks except for posterior tibia which is uniformly light brown. Subgenital plate of male genitalia darker ventrally.

*Structure.* Head (Figs. 3–4) small, distinctly narrower than thorax, slightly deflexed. Vertex in dorsal view deeply emarginate on front margin, with anterior ocellus at apex of emargination and visible from above, with a pair of excavation between median line and elevated post-ocellar area, with long pubescence sparsely. Genal cones wanting, but genae more or less swollen near base of antenna, with long setae; frons covered by genae, not visible. Antenna long, slender, 2.6–2.7 times as long as width of head, with short setae on basal segments and at apex of each segment, with 1 long and 1 short apical setae; relative length of each antennal segment for example as 1.5 : 1.5 : 8.5 : 4 : 4 : 4 : 4 : 1.5 : 1.5.

Thorax large, strongly arched, with conspicuous pubescence. Pronotum almost vertical, below plane of praescutum and vertex. Forewing (Fig. 1) long, broad, 2.5–2.6 times as long as wide, more or less narrowly rounded at apex, with venation as figured. Hind wing



Figs. 1-9. *Rhinopsylla hidakensis* sp. nov. — 1. Forewing, ♂. — 2. Hind wing, ♀. — 3. Head, dorsal view, ♂. — 4. Head, frontal view, ♂. — 5. Posterior leg. — 6. Meracanthus. — 7. Male genitalia. — 8. Male forceps, inner face. — 9. Female genitalia.

(Fig. 2) large,  $2/3$  as long as forewing, about 3.2 times as long as wide, venation triozone. Legs long, densely hairy; posterior tibia (Fig. 5) long and slender, without prominent basal spur, but more or less serrate as figured, with 1 outer and 3 (sometimes 4) inner apical spurs; proximal segment of posterior tarsi without apical spur; meracanthus (Fig. 6) large, produced ventro-caudad, acute at apex. Abdomen (excl. genitalia) long, nearly as long as thorax, rather densely pubescent only ventrally.

Male genitalia (Fig. 7) small, about  $1/3$  as long as rest of abdomen; proctiger long, 1.5 times as long as forceps, with posterior margin strongly produced caudad, with long pubescence as figured; forceps stout, rather narrow in basal half, enlarged in apical half as figured, with sparse pubescence in apical half, inner face (Fig. 8) beset with numerous strong retrorse setae as figured; aedeagus long, with apical portion rather characteristic; subgenital plate subtriangular, sparsely hairy. Female genitalia (Fig. 9) large, nearly  $2/3$  as long as rest of abdomen; dorsal valve distinctly longer than ventral, with dorsal margin in lateral view slightly convex at two-thirds of its length, attenuate apically, with area of minute spines laterally in addition to usual setae, blunt at apex; ventral valve in lateral view strongly produced ventrad medially as figured, sharply pointed and upturned at apex, pubescent throughout.

Length of body (alcoholized specimens) ♂ 3.2–3.5 mm, ♀ 3.5–4.1 mm; to tip of folded wings ♂ 4.8–5.1 mm, ♀ 5.6 mm; length of forewing ♂ 3.9–4.1 mm, ♀ 4.3–4.6 mm; width of forewing ♂ 1.5–1.6 mm, ♀ 1.8–1.9 mm; length of hind wing ♂ 2.6–2.8 mm, ♀ 3.0–3.2 mm; width of hind wing ♂ 0.8–1.0 mm, ♀ 0.9–1.0 mm; length of antenna ♂ 1.9–2.2 mm, ♀ 2.1–2.3 mm.

*Holotype* (♂). Poroshiri-sansō, alt. 1,000 m, at foot of Mt. Poroshiri, Hidaka Mountain Range, Hokkaido, 27. vii. 1971, J. Aoki leg. (The type specimen which was kept in alcohol and dried afterward will be preserved at the National Science Museum, Tokyo.)

*Paratopotypes*. 4♂ 3♀ (1♂ 1♀ on slides), the same data as the holotype. 2♂, the same data as the holotype, by beating, J. AOKI leg. (The paratopotypes will be kept at the National Science Museum, Tokyo, and the Osaka Museum of Natural History.)

*Distribution*. Japan (Hokkaido).

*Host plant*. Unknown. It seems that the present material was collected from the host plant, as some specimens are not fully mature.

This species is very closely related to *R. takahashii* BOSELLI from Formosa and *R. stylata* CRAWFORD from W. Himalaya (Simla). Differs from *takahashii* in being much larger, in having a longer Rs and a larger medial cell of forewing, male forceps which are more enlarged apically, and a shorter and stouter female genitalia, the ventral valve of which is characteristically producing ventrad near middle. (The materials of *takahashii* from Alishan, Formosa, were examined for comparison with the present species.) Differs from *stylata* in being much larger, in having an antenna which is unicolorous and distinctly shorter than 3 times the width of head, a cubital cell of forewing which is longer and lower, and in the shape and structure of female genitalia.

## 要 約

北海道日高山脈の幌尻岳から下記の2属6種のキジラミが得られ、そのうちの1種は新種であったので、記載した。

1. *Psylla alni* (L.) ハンノキジラミ 1♀, 北カール; 1♂, 馬の背; 7♂ 7♀, ポロシリ山荘 (灯火)
2. *Psylla* sp. 1♂, 北カール; 3♂ 1♀, ポロシリ山荘 (灯火)  
この種は新種と思われるが、近縁種の比較標本が入手できてから命名・記載したい。
3. *Psylla abieti* (Kuw.) トドキジラミ 2♂ 3♀, ポロシリ山荘 (灯火)
4. *Psylla jezoensis* MIYA. 1♂ 1♀, ポロシリ山荘 (灯火)
5. *Psylla haimatsucola* MIYA. ハイマツキジラミ 2♂ 1♀, 馬の背; 10♂ 17♀, ポロシリ山荘 (灯火)
6. *Rhinopsylla hidakensis* MIYA. (新種) 7♂ 3♀, ポロシリ山荘

*Psylla* 属の5種はいずれも大雪山系からも得られており、すべて旧北区系のキジラミである。*Rhinopsylla la hidakensis* は西部シナ系の要素と考えられる。*Rhinopsylla* 属は本邦からはじめて記録された。

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